TOWN OF ARLINGTON
REDEVELOPMENT BOARD
Application for Special Permit In Accordance with Environmental Design Review Procedures (Section 11.06 of the Zoning Bylaw)

Docket No. _____

1. Property Address 483 SUMMER ST. ARLINGTON, MA 02474
Name of Record Owner(s) CAMPOBASSO PROPERTIES LLC Phone 781-646-5569
Address of Owner 290 MASS. AVE (Street), ARLINGTON, MA 02474 (City, State, Zip)

2. Name of Applicant(s) (if different than above) SAME AS ABOVE
Address ~~~~ Phone ~~~~
Status Relative to Property (occupant, purchaser, etc.) ~~~~OWNER~~~~

3. Location of Property MAP 082.0, BLOCK 0003, LOT 0003.0
Assessor's Block Plan, Block, Lot No.

4. Deed recorded in the Registry of deeds, Book 13819, Page 139;
-or- registered in Land Registration Office, Cert. No. _____, in Book _____, Page _____.

5. Present Use of Property (include # of dwelling units, if any) REPAIR SHOP (VACANT)

6. Proposed Use of Property (include # of dwelling units, if any) MIXED USE RESIDENTIAL + COMMERCIAL FOUR STORES, 1 OFFICE, 7 RESIDENCES

7. Permit applied for in accordance with the following Zoning Bylaw section(s)

section(s)	title(s)
5.04/s.7.13	Mixed use development -residential/commercial
Article 11 s.11.06	Special Regulations
8.01A	Parking for residential/commercial mixed use
8.12	Reduction for parking requirement for mixed development

8. Please attach a statement that describes your project and provide any additional information that may aid the ARB in understanding the permits you request. Include any reasons that you feel you should be granted the requested permission.

(In the statement below, strike out the words that do not apply)

The applicant states that CAMPOBASSO PROPERTIES LLC is the owner -*or*- occupant -*or*- purchaser under agreement of the property in Arlington located at 483 SUMMER ST. ARLINGTON, MA 02474 which is the subject of this application; and that unfavorable action -*or*- no unfavorable action has been taken by the Zoning Board of Appeals on a similar application regarding this property within the last two years. The applicant expressly agrees to comply with any and all conditions and qualifications imposed upon this permission, either by the Zoning Bylaw or by the Redevelopment Board, should the permit be granted.

Signature of Applicant(s) Campobasso Properties, LLC, by its attorney, Robert J. Annese

290 MASS. AVE ARLINGTON, MA 02474 (Address) 781-646-5569 (Phone)

7/08

Lot Size: 10,000 sf
Zoning District: B2
Proposed Use: Mixed Use, 4 Stores, 1 Office and 7 Residences
Building: 3 Story with Cellar
Wood Frame with Fire Protection
Foot Print: 3,892 sf
Gross Residential Floor Area: 7,100 sf
Total Gross Floor Area: 11,946 sf
Open Area Landscaped 969 sf
Open Area Usable 1,420 sf

Proposed 483 Summer Street

Site Plan of Land of 483 & 489 Summer Street
Proposed Site Plan of 483 & 489 Summer Street
Drainage Detail Sheet of 483 & 489 Summer Street
Landscape Plan of 483 & 489 Summer Street
A-0 Cellar Plan
A-1 Ground Level
A-2 Second Level
A-3 Third Floor
A-4 Roof Top
A-5 Residence Stairways
A-6 North Elevation
A-7 South Elevation
A-8 East Elevation
A-9 West Elevation

Prepared For: Campobasso Properties LLC
290 Mass. Ave.
Arlington, MA 02474

Prepared By: A. R. Ronayne & Sons LLC
28 Grove Street Place
Arlington, MA 02474

Date: 9/7/16
Scale: 1/4" = 1'-0"

Town of Arlington Redevelopment Board
Application for Special Permit in accordance with
Environmental Design Review (Section 11.06)

Required Submittals Checklist

File each in triplicate except for model
References are to Arlington Zoning Bylaw

(1) ____ Dimensional and Parking Information Form

(2) ____ Site plan of proposal (Section 10.11(c))

(3) ____ Model, if required (Section 11.06(d)(1))

(4) ____ Drawing of existing conditions (Section 11.06(d)(3))

(5) ____ Drawing of proposed structure (Section (d)(3))

(6) ____ Proposed landscaping. May be incorporated into site plan (Section11.06(d)(3))

(7) ____ Photographs (Section 11.06(d)(4))

(8) ____ Impact statement (Section 11.06(d)(6))

(9) ____ Application and plans for sign permits (Section 11.06(d)(6))

FOR OFFICE USE ONLY

____ Special Permit Granted Date: _____

____ Received evidence of filing with Registry of Deeds Date: _____

____ Notified Building Inspector of Special Permit filing Date: _____

TOWN OF ARLINGTON
Dimensional and Parking Information
for Application to
The Arlington Redevelopment Board

Docket No. _____

Property Location 483 SUMMER ST, ARLINGTON, MA. Zoning District B2

Owner: CAMPOBASSO PROPERTIES LLC Address: 290 MASS AVE, ARLINGTON, MA 02474

Present Use/Occupancy: No. of Dwelling Units:
VACANT

Uses and their gross square feet:
AUTO REPAIR 1,148 sq

Proposed Use/Occupancy: No. of Dwelling Units:
MIX USE 4 STORES - 1 OFFICE 7 RESIDENCE

Uses and their gross square feet:
STORES 3,524 sq OFFICE 782 sq RESIDENCES 7,100 sq

		Present Conditions	Proposed Conditions	Min. or Max. Required by Zoning for Proposed Use
Lot Size		10,000 sq	10,000 sq	min. MIN.
Frontage		100 L.F.	100 L.F.	min. 50 L.F.
Floor Area Ratio		.11	1.36	max. 1.5
Lot Coverage (%) (where applicable)		NA	NA	max. NA
Lot Area per Dwelling Unit (square feet)		NA	1,429 sq	min. 1,450 sq
Front Yard Depth (Ft.)		—	—	min. —
Side Yard Width (Ft.)	right side	—	—	min. —
	left side	—	—	min. —
Rear Yard Depth (Ft.)		NA	41'	min. 18.4'
Height		—	—	min. —
Stories		1	3	stories 3
Feet		20'	38'	feet 40
Open Space (% of G.F.A.) RESIDENTIAL		—	—	min. —
Landscaped (s.f.)		NA	969 sq	(s.f.) 710 sq
Usable (s.f.)			1,420 sq	(s.f.) 1,420 sq
Parking Spaces (No.)		NA	9	min. 19
Parking Area Setbacks (Ft.) (where applicable)		NA	5'	min. 5'
Loading Spaces (No.)		NA	SHARED	min. 1
Type of Construction		FIRE PROTECTED WOOD FRAME		
Distance to Nearest Building		—	22'+	min. —

A.R. Ronayne & Sons LLC

28 Grove Street Place
Arlington, MA 02474
(781) 648- 0627

Site Plan

Please see:

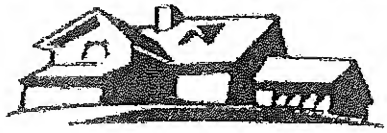
Proposed Site Plan
Of
483 & 489 Summer Street
In
Arlington, MA

Prepared By: Paul J. Finocchio P.L.S. No.36115
P.J.F. and Associates
4 Highland Avenue
Wakefield, MA 01880
(781)246-5426

Plan Includes:

Dimensions of Lot
Proposed Building and Set Backs
Proposed Drainage
Dumpster Location
Landscape Layout

A.R. Ronayne & Sons LLC



28 Grove Street Place
Arlington, MA 02474
(781) 648- 0627

Proposed Structure

Please see:

Proposed 483 Summer Street
Arlington, MA

Prepared By: A. R. Ronayne & Sons LLC
28 Grove Street Place
Arlington, MA 02474

Plan Includes:

- Floor Plans for cellar, first, second and third floors
- Elevations of all sides of the building

Sullivan Engineering Group, LLC
Civil Engineers & Land Development Consultants

November 21, 2016

Town of Arlington Engineering Department

Re: 483-489 Summer Street, Arlington
Site Redevelopment

To Whom It May Concern:

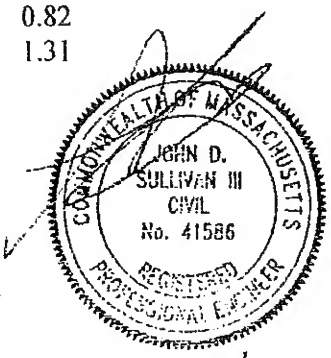
The owner of #483-#489 Summer Street is seeking to redevelop a portion of the property, specifically #483 Summer Street. In order to mitigate increases in pavement, walkways, and building areas the applicant is proposing to install porous pavement with a constructed stone subbase to provide storage and infiltration of stormwater runoff. Soil testing was conducted on the property on 8/25/16 by Jack Sullivan, PE, CSE. The site was predominately fill in the front of the site and a Loamy Sand was identified to the rear of the site. There was no indication of a seasonal high groundwater table to a depth of 84". The NRCS soil maps show this area as "urban soils" and as such the site was modeled for "B" type soils. The Site Plans for this project prepared by PJF Associates provide a construction detail showing the porous pavement specifications including the subbase preparation. Additionally, an Operation and Maintenance plan for short term & long term maintenance is shown on this detail sheet and the O&M plan should be part of the Conditions of Approval. As a conservative approach, the porous pavement was modeled with an exfiltration rate of 60 MPI which is equivalent to a Sandy Loam – Class B soil under the Rawl's method.

All existing pavement areas onsite (@ #483 Summer Street) will be removed and replaced with porous pavement and the required subbase to provide consistency in maintenance for the site in the post development scenario. The roofed area of the proposed building will be conveyed via 4" HDPE solid pipe into the subbase material and then the roof drain shall change to 4" HDPE perforated pipe. A minimum of two feet of cover should be provided over the roof drain within the travel way.

The HydroCAD report models the Predevelopment Condition vs. Postdevelopment Condition for the entire site area. The stormwater design reduces the peak rate of runoff and volume for the 2, 10, and 100 year storm event. The following is summary of the peak rate of runoff for various storm events:

Storm Event	Predevelopment (cfs)	Postdevelopment (cfs)
2 Year	0.52	0.06
10 Year	0.82	0.12
100 Year	1.31	0.22

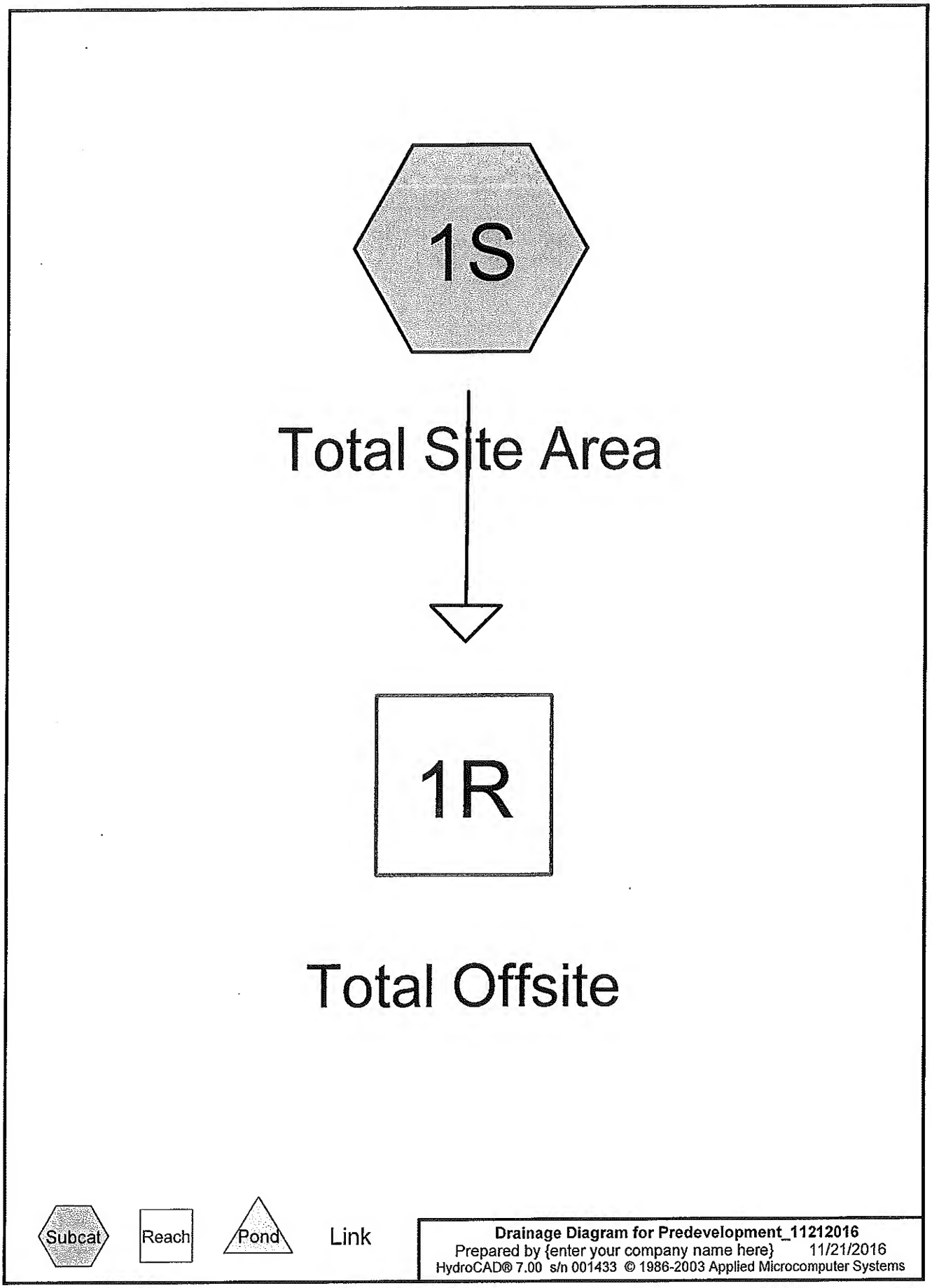
Very Truly Yours,



John (Jack) D. Sullivan III, PE

11-21-16

PO Box 2004 Woburn, MA 01888 (781) 854-8644 e-mail: jacksull53@comcast.net



Drainage Diagram for Predevelopment_11212016
Prepared by {enter your company name here} 11/21/2016

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Total Site Area Runoff Area=10,000 sf Runoff Depth=1.86"
Tc=6.0 min CN=90 Runoff=0.52 cfs 0.036 af

Reach 1R: Total Offsite Inflow=0.52 cfs 0.036 af
Outflow=0.52 cfs 0.036 af

Total Runoff Area = 0.230 ac Runoff Volume = 0.036 af Average Runoff Depth = 1.86"

Subcatchment 1S: Total Site Area

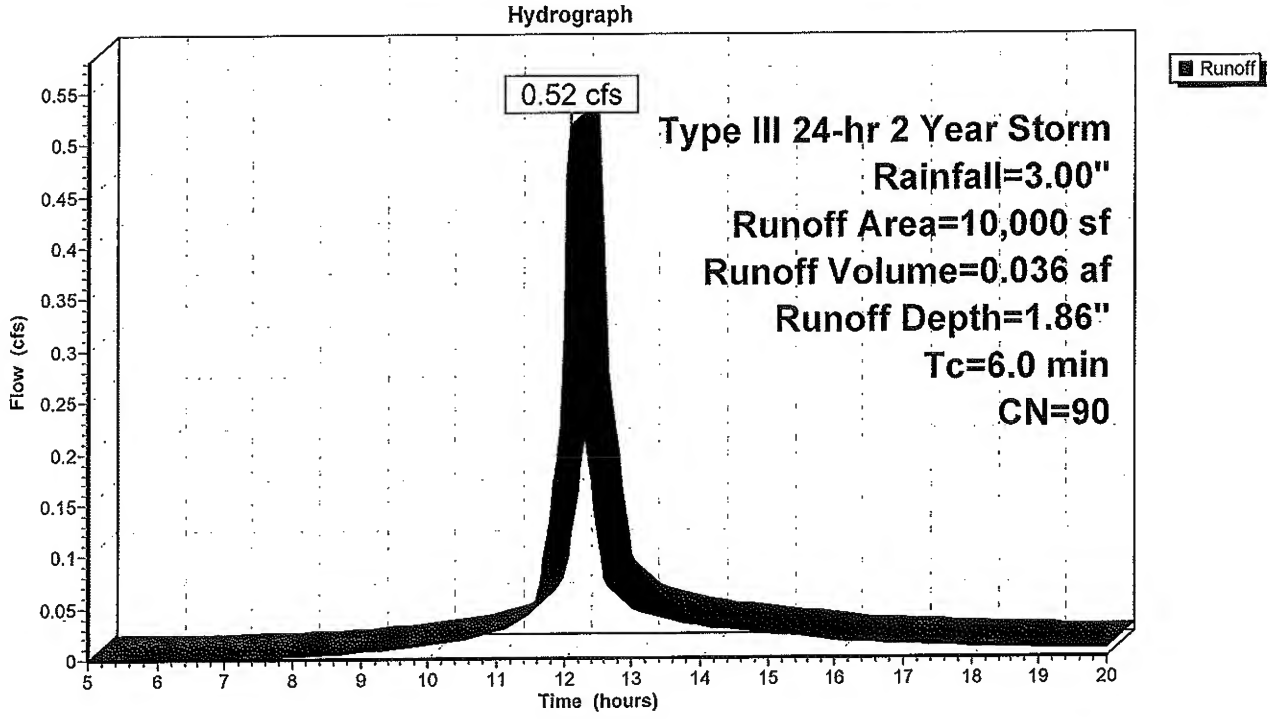
Runoff = 0.52 cfs @ 12.09 hrs, Volume= 0.036 af, Depth= 1.86"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Storm Rainfall=3.00"

Area (sf)	CN	Description
1,165	98	Ex. Building Roof
5,972	98	Pavement/Conc Areas
2,863	69	50-75% Grass cover, Fair, HSG B
10,000	90	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 1S: Total Site Area

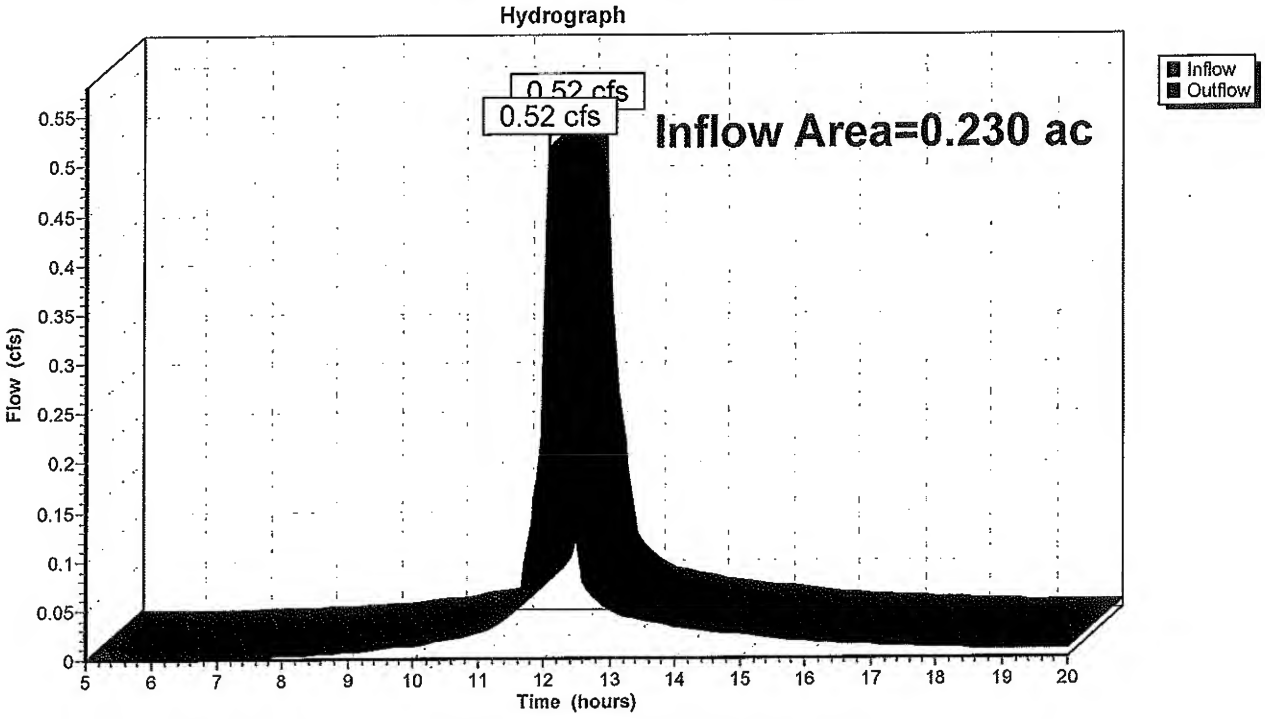


Reach 1R: Total Offsite

Inflow Area = 0.230 ac, Inflow Depth = 1.86" for 2 Year Storm event
Inflow = 0.52 cfs @ 12.09 hrs, Volume= 0.036 af
Outflow = 0.52 cfs @ 12.09 hrs, Volume= 0.036 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach 1R: Total Offsite



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Total Site Area Runoff Area=10,000 sf Runoff Depth=3.02"
Tc=6.0 min CN=90 Runoff=0.82 cfs 0.058 af

Reach 1R: Total Offsite Inflow=0.82 cfs 0.058 af
Outflow=0.82 cfs 0.058 af

Total Runoff Area = 0.230 ac Runoff Volume = 0.058 af Average Runoff Depth = 3.02"

Subcatchment 1S: Total Site Area

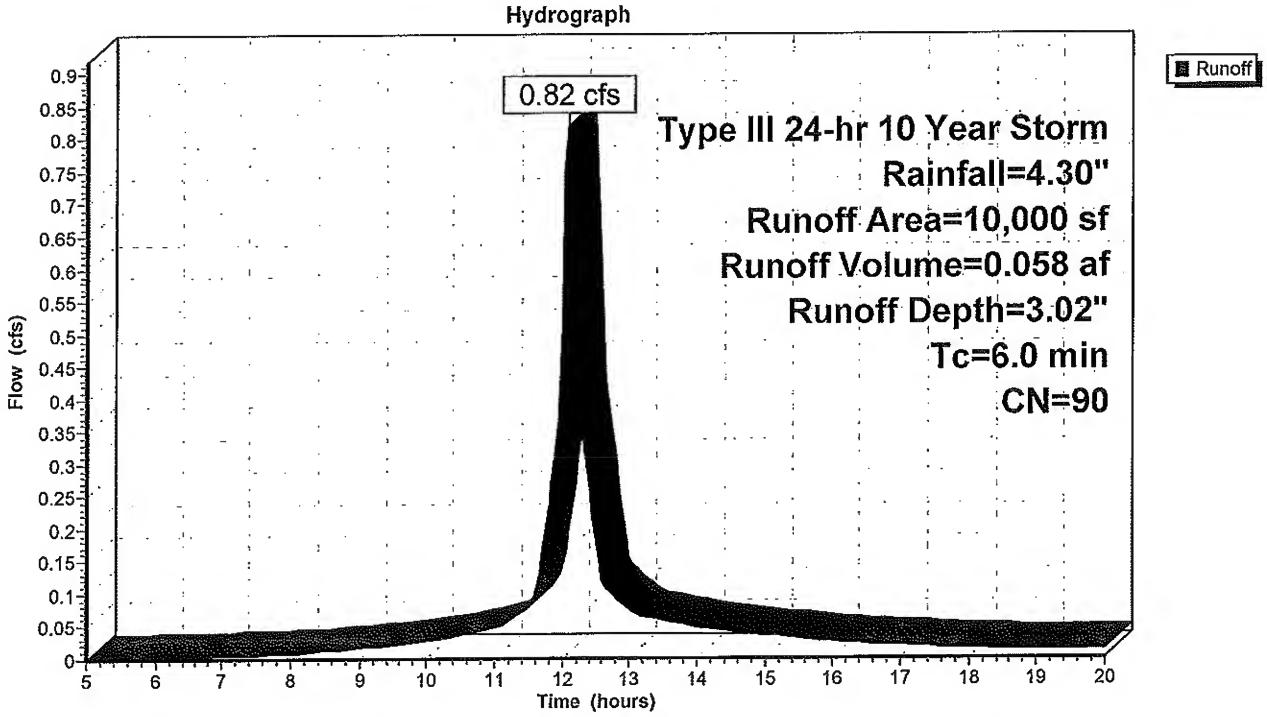
Runoff = 0.82 cfs @ 12.09 hrs, Volume= 0.058 af, Depth= 3.02"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 Year Storm Rainfall=4.30"

Area (sf)	CN	Description
1,165	98	Ex. Building Roof
5,972	98	Pavement/Conc Areas
2,863	69	50-75% Grass cover, Fair, HSG B
10,000	90	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 1S: Total Site Area

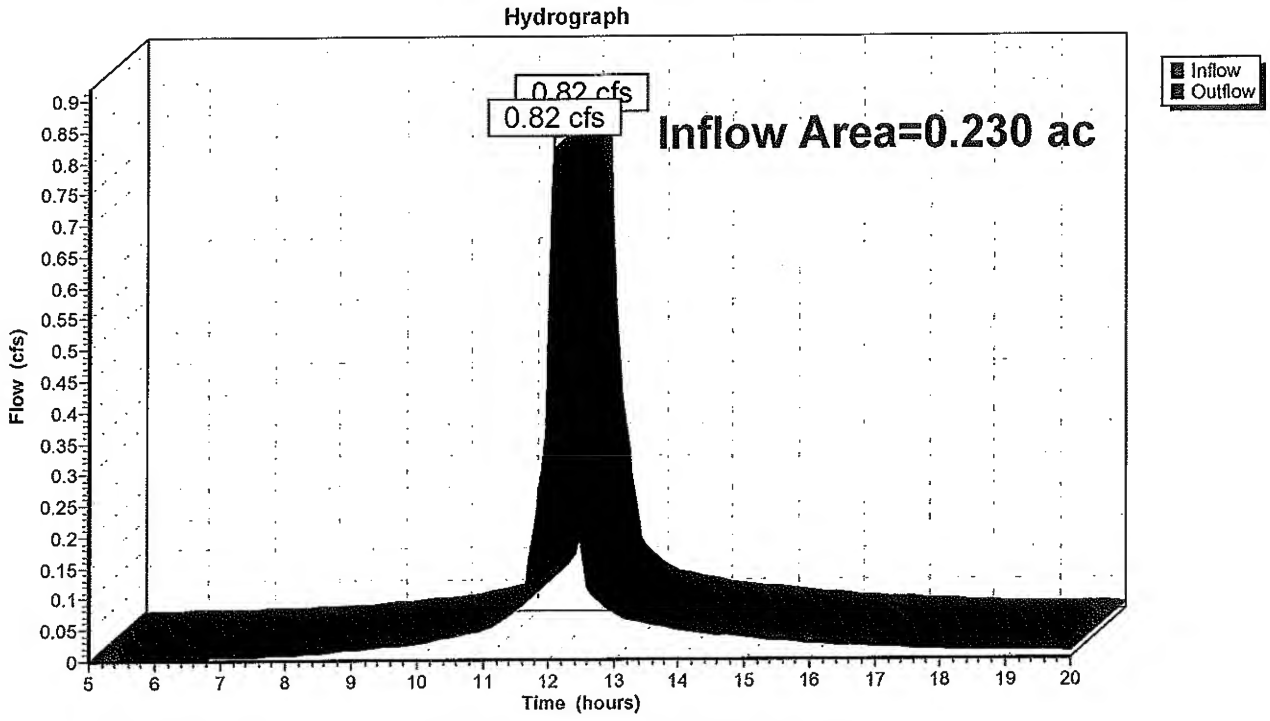


Reach 1R: Total Offsite

Inflow Area = 0.230 ac, Inflow Depth = 3.02" for 10 Year Storm event
Inflow = 0.82 cfs @ 12.09 hrs, Volume= 0.058 af
Outflow = 0.82 cfs @ 12.09 hrs, Volume= 0.058 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach 1R: Total Offsite



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Total Site Area Runoff Area=10,000 sf Runoff Depth=4.95"
Tc=6.0 min CN=90 Runoff=1.31 cfs 0.095 af

Reach 1R: Total Offsite Inflow=1.31 cfs 0.095 af
Outflow=1.31 cfs 0.095 af

Total Runoff Area = 0.230 ac Runoff Volume = 0.095 af Average Runoff Depth = 4.95"

Subcatchment 1S: Total Site Area

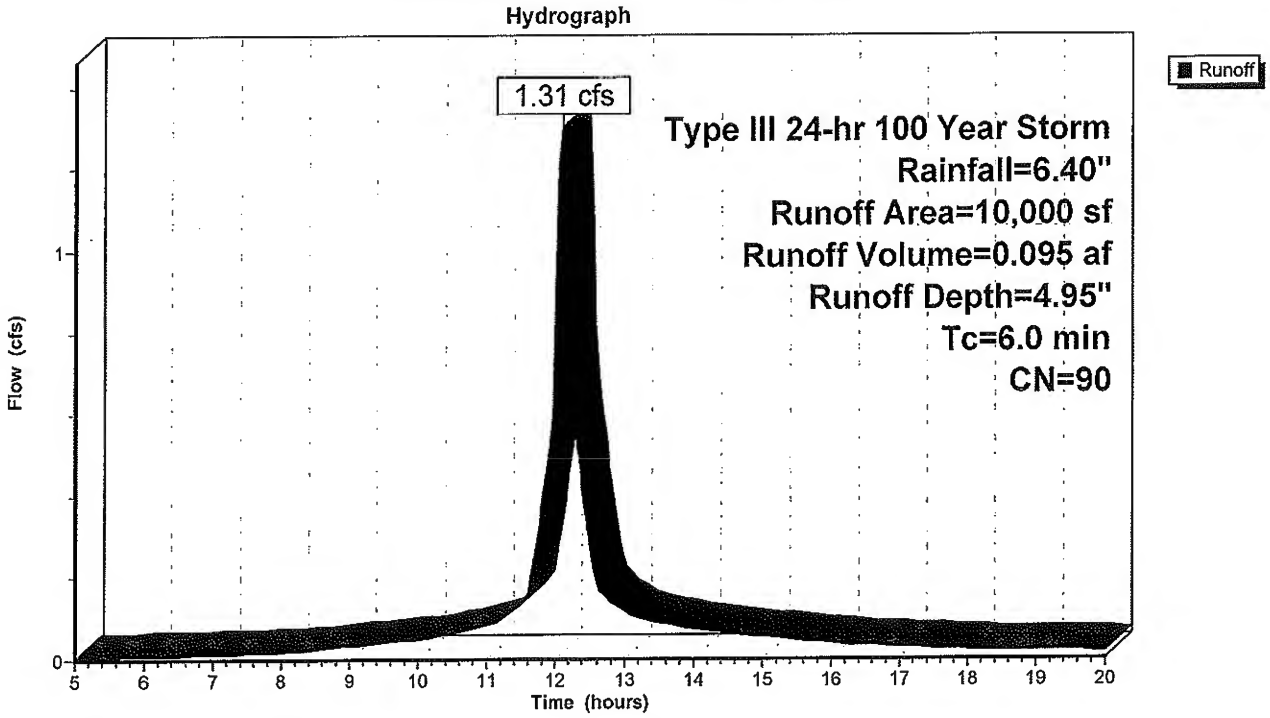
Runoff = 1.31 cfs @ 12.09 hrs, Volume= 0.095 af, Depth= 4.95"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100 Year Storm Rainfall=6.40"

Area (sf)	CN	Description
1,165	98	Ex. Building Roof
5,972	98	Pavement/Conc Areas
2,863	69	50-75% Grass cover, Fair, HSG B
10,000	90	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 1S: Total Site Area

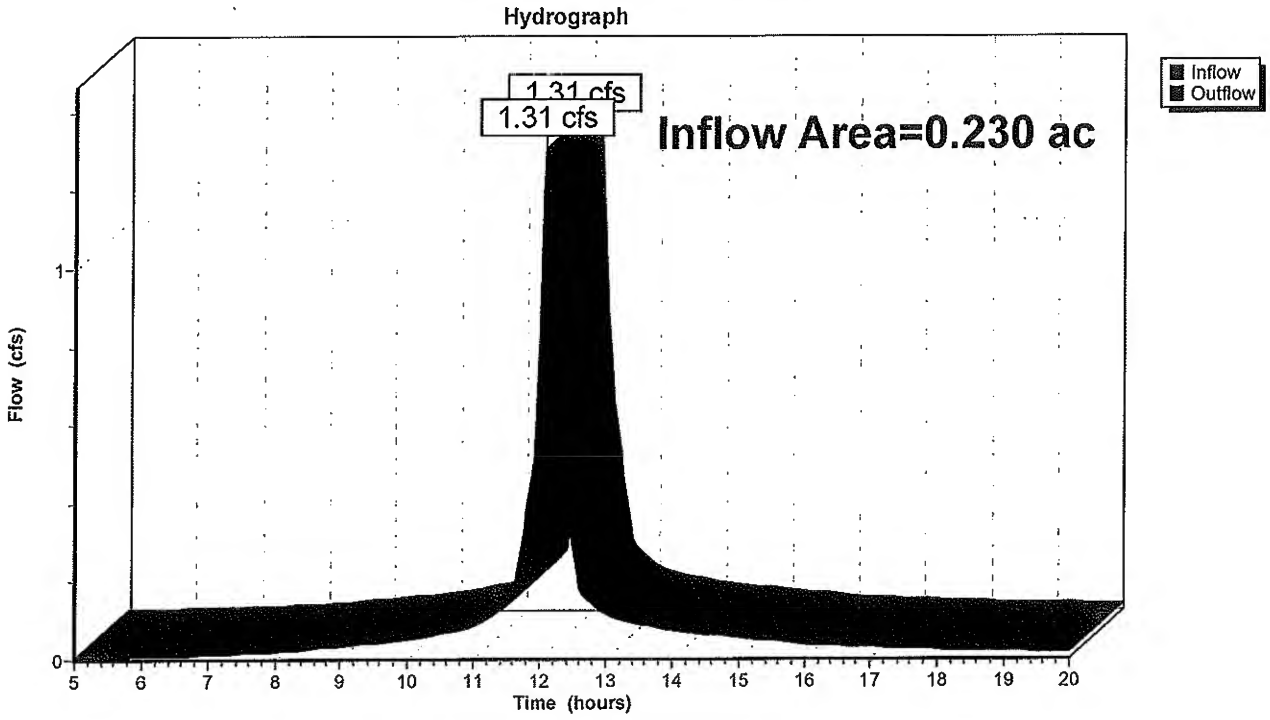


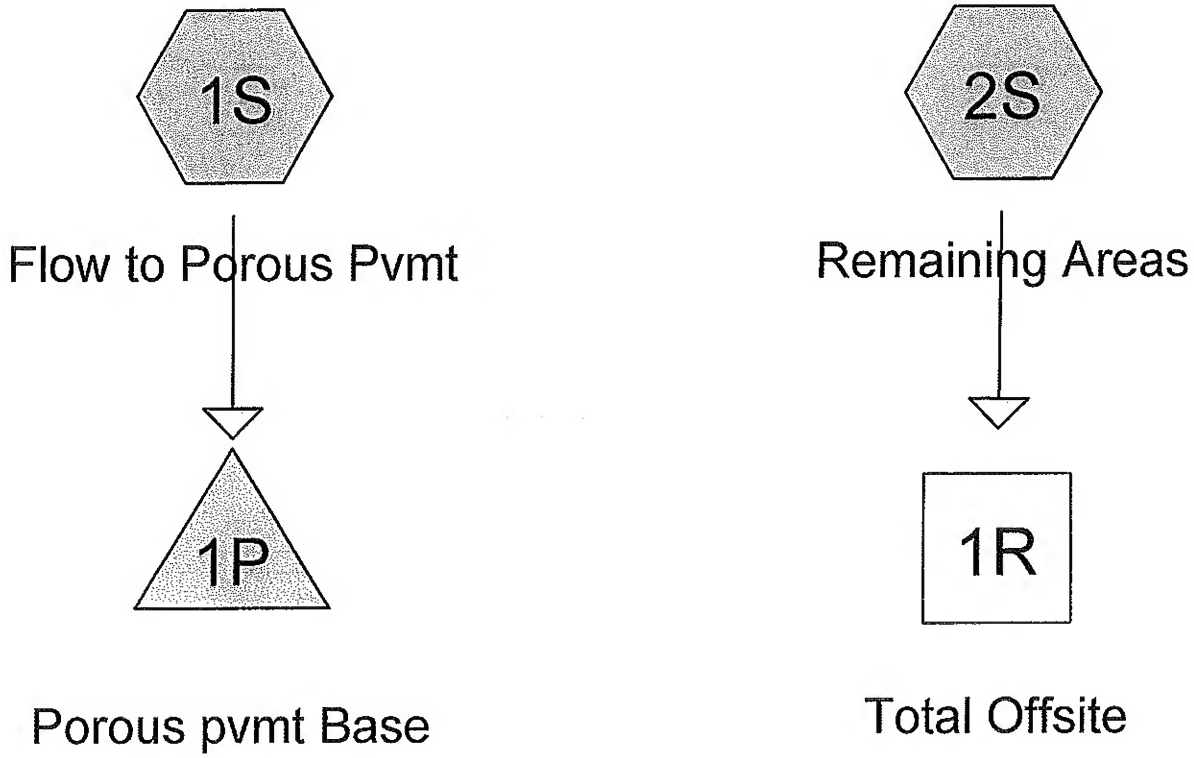
Reach 1R: Total Offsite

Inflow Area = 0.230 ac, Inflow Depth = 4.95" for 100 Year Storm event
Inflow = 1.31 cfs @ 12.09 hrs, Volume= 0.095 af
Outflow = 1.31 cfs @ 12.09 hrs, Volume= 0.095 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach 1R: Total Offsite





Subcat Reach Pond Link

Drainage Diagram for Postdevelopment_11212016
Prepared by {enter your company name here} 11/21/2016
HydroCAD® 7.00 s/n 001433 © 1986-2003 Applied Microcomputer Systems

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Flow to Porous Pvmt Runoff Area=7,914 sf Runoff Depth=1.67"
Tc=462.0 min CN=98 Runoff=0.05 cfs 0.025 af

Subcatchment 2S: Remaining Areas Runoff Area=2,086 sf Runoff Depth=1.09"
Tc=6.0 min CN=79 Runoff=0.06 cfs 0.004 af

Reach 1R: Total Offsite Inflow=0.06 cfs 0.004 af
Outflow=0.06 cfs 0.004 af

Pond 1P: Porous pvmt Base Peak Elev=97.01' Storage=18 cf Inflow=0.05 cfs 0.025 af
Outflow=0.05 cfs 0.025 af

Total Runoff Area = 0.230 ac Runoff Volume = 0.030 af Average Runoff Depth = 1.55"

Subcatchment 1S: Flow to Porous Pvmt

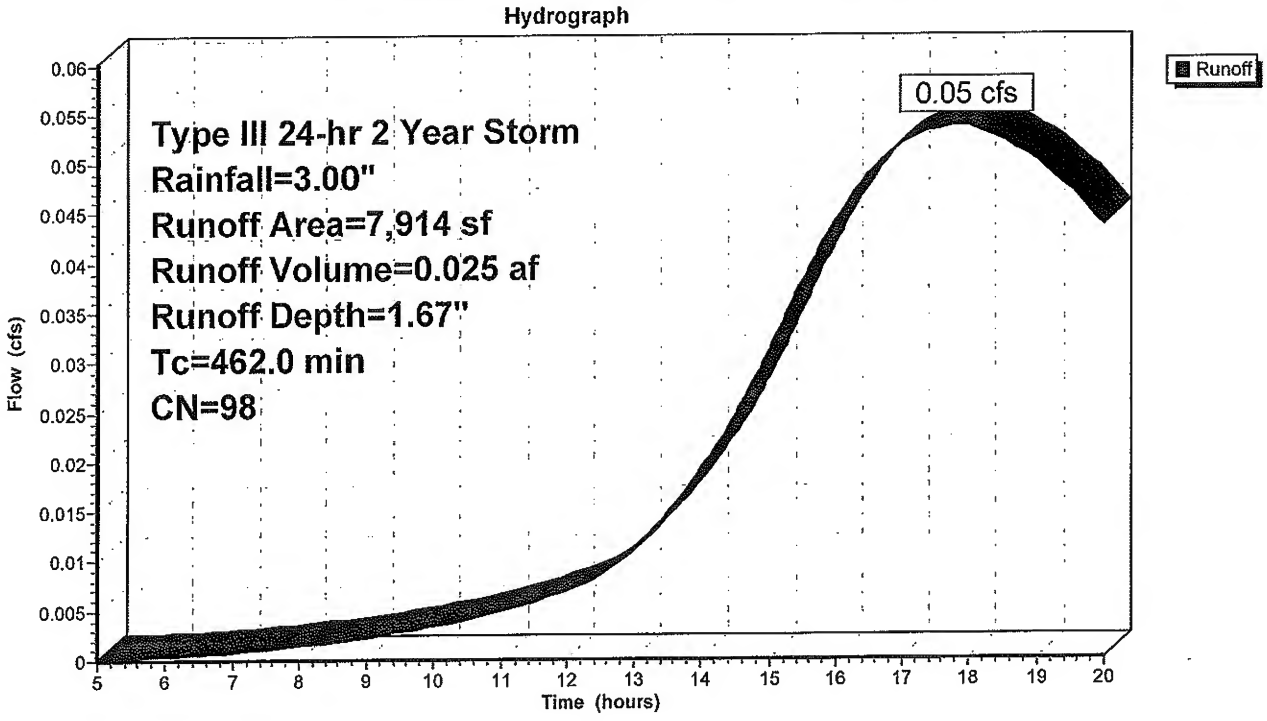
Runoff = 0.05 cfs @ 17.94 hrs, Volume= 0.025 af, Depth= 1.67"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Storm Rainfall=3.00"

Area (sf)	CN	Description
3,860	98	Porous Pvmt
3,892	98	Portion of Roofed Area
162	98	dumpster pad area
7,914	98	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
462.0					**Direct Entry,**

Subcatchment 1S: Flow to Porous Pvmt



Subcatchment 2S: Remaining Areas

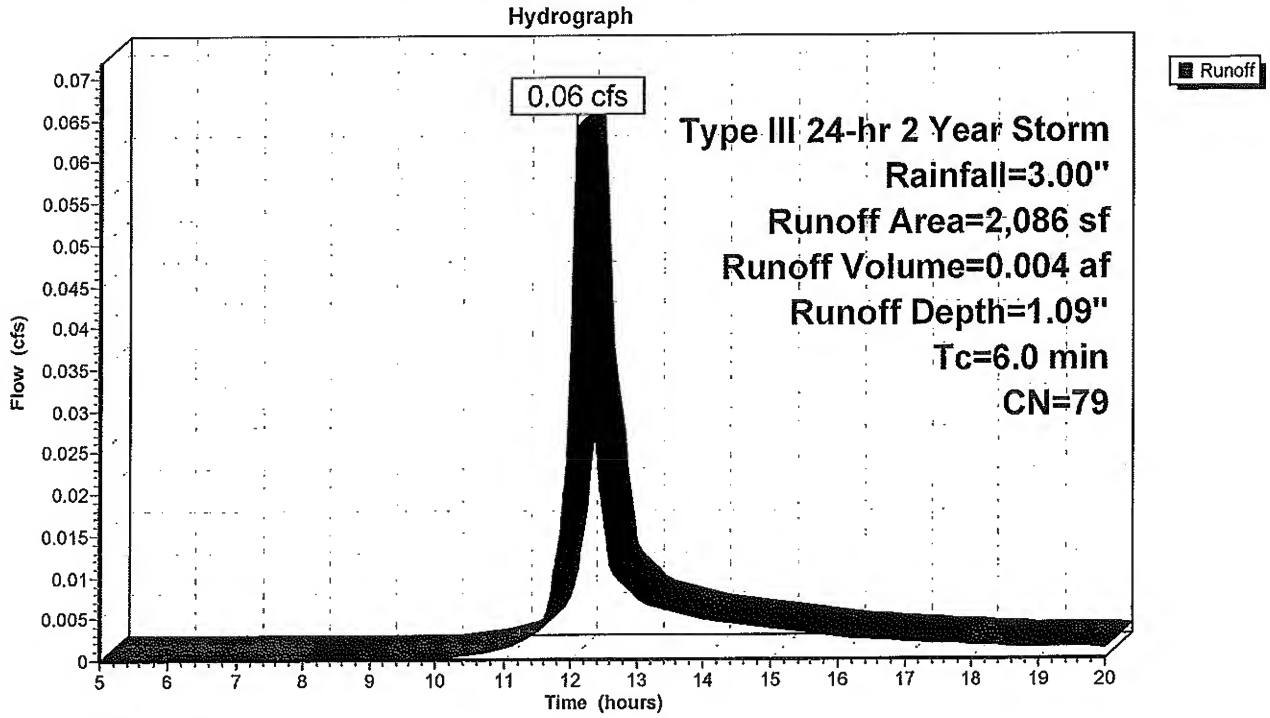
Runoff = 0.06 cfs @ 12.10 hrs, Volume= 0.004 af, Depth= 1.09"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Storm Rainfall=3.00"

Area (sf)	CN	Description
426	98	Walkway
307	98	Apshalt Berm
1,353	69	50-75% Grass cover, Fair, HSG B
2,086	79	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 2S: Remaining Areas

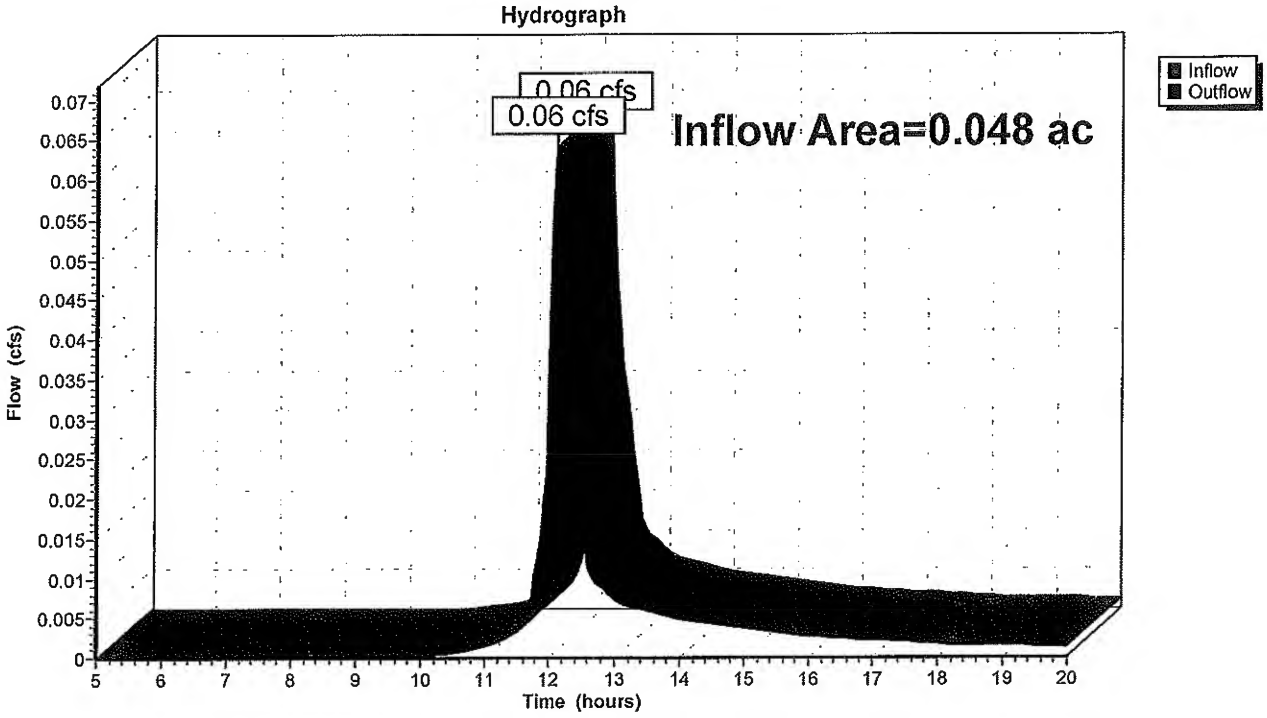


Reach 1R: Total Offsite

Inflow Area = 0.048 ac, Inflow Depth = 1.09" for 2 Year Storm event
Inflow = 0.06 cfs @ 12.10 hrs, Volume= 0.004 af
Outflow = 0.06 cfs @ 12.10 hrs, Volume= 0.004 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach 1R: Total Offsite



Pond 1P: Porous pvmt Base

Design Perc rate of soils = 60 MPI

Inflow Area = 0.182 ac, Inflow Depth = 1.67" for 2 Year Storm event
Inflow = 0.05 cfs @ 17.94 hrs, Volume= 0.025 af
Outflow = 0.05 cfs @ 17.99 hrs, Volume= 0.025 af, Atten= 0%, Lag= 3.0 min
Discarded = 0.05 cfs @ 17.99 hrs, Volume= 0.025 af

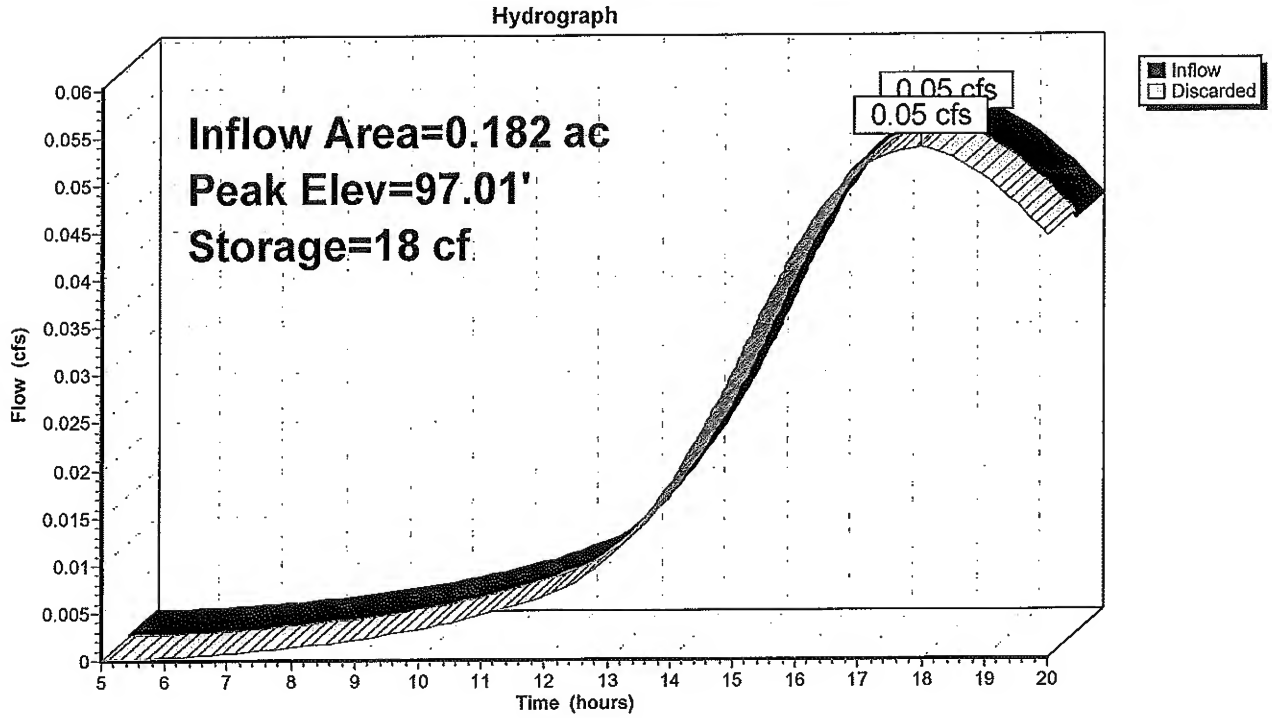
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 97.01' @ 17.99 hrs Surf.Area= 3,860 sf Storage= 18 cf
Plug-Flow detention time= 5.7 min calculated for 0.025 af (99% of inflow)
Center-of-Mass det. time= 2.8 min (999.4 - 996.5)

#	Invert	Avail.Storage	Storage Description
1	97.00'	3,088 cf	**38.60'W x 100.00'L x 2.00'H Prismatoid** 7,720 cf Overall x 40.0% Voids

#	Routing	Invert	Outlet Devices
1	Discarded	0.00'	**0.001400 fpm Exfiltration over entire Surface area**

Discarded OutFlow Max=0.09 cfs @ 17.99 hrs HW=97.01' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.09 cfs)

Pond 1P: Porous pvmt Base



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Flow to Porous Pvmt Runoff Area=7,914 sf Runoff Depth=2.47"
Tc=462.0 min CN=98 Runoff=0.08 cfs 0.037 af

Subcatchment 2S: Remaining Areas Runoff Area=2,086 sf Runoff Depth=2.05"
Tc=6.0 min CN=79 Runoff=0.12 cfs 0.008 af

Reach 1R: Total Offsite Inflow=0.12 cfs 0.008 af
Outflow=0.12 cfs 0.008 af

Pond 1P: Porous pvmt Base Peak Elev=97.02' Storage=27 cf Inflow=0.08 cfs 0.037 af
Outflow=0.08 cfs 0.037 af

Total Runoff Area = 0.230 ac Runoff Volume = 0.046 af Average Runoff Depth = 2.38"

Subcatchment 1S: Flow to Porous Pvmt

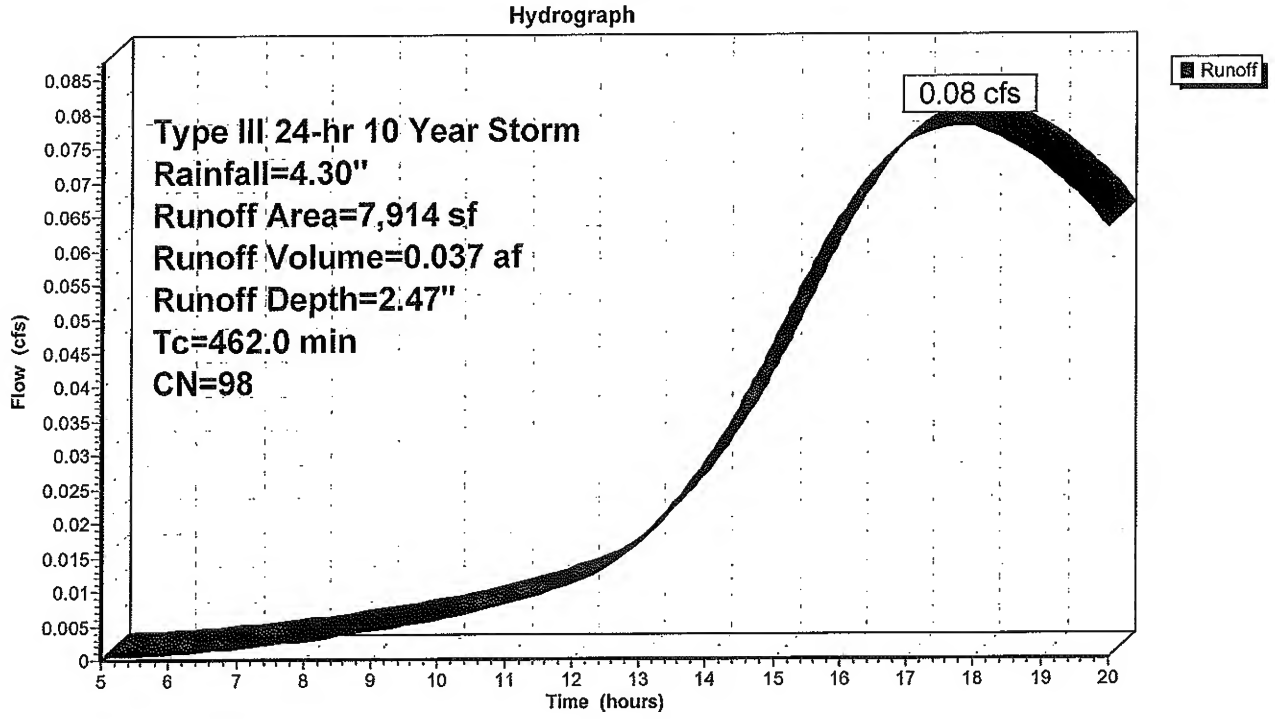
Runoff = 0.08 cfs @ 17.94 hrs, Volume= 0.037 af, Depth= 2.47"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 Year Storm Rainfall=4.30"

Area (sf)	CN	Description
3,860	98	Porous Pvmt
3,892	98	Portion of Roofed Area
162	98	dumpster pad area
7,914	98	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
462.0					**Direct Entry,**

Subcatchment 1S: Flow to Porous Pvmt



Subcatchment 2S: Remaining Areas

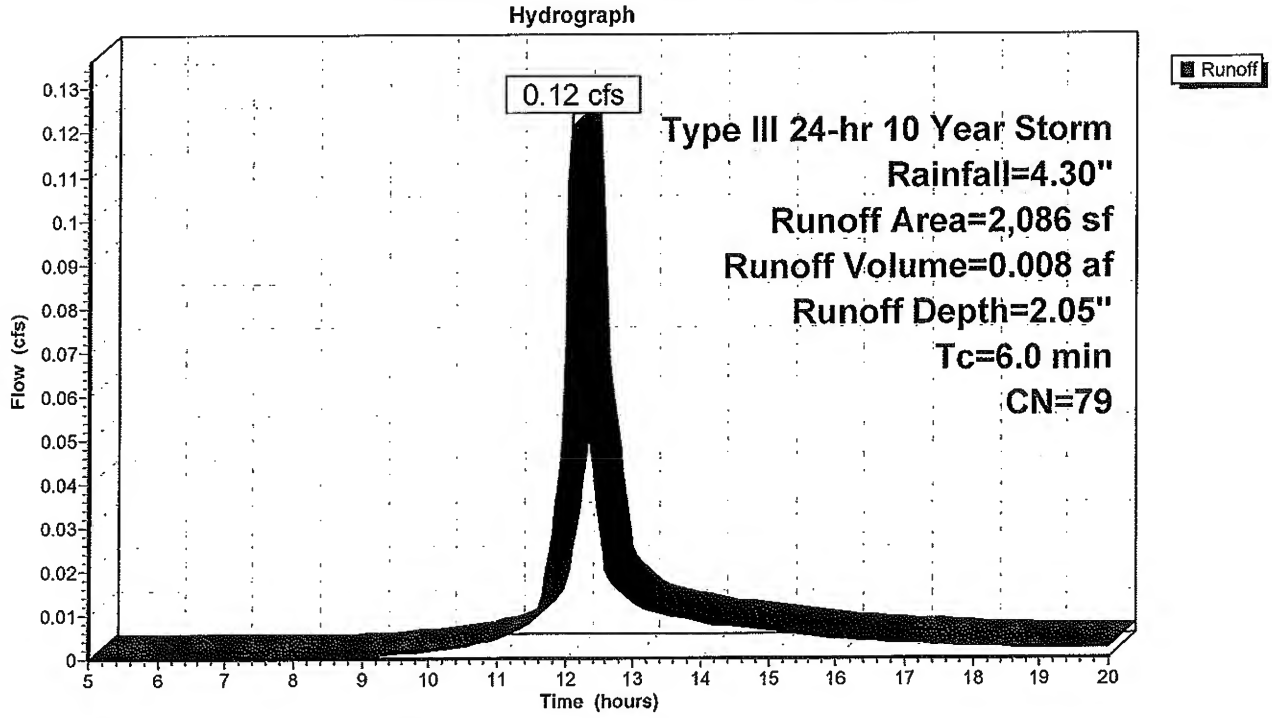
Runoff = 0.12 cfs @ 12.09 hrs, Volume= 0.008 af, Depth= 2.05"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 Year Storm Rainfall=4.30"

Area (sf)	CN	Description
426	98	Walkway
307	98	Apshalt Berm
1,353	69	50-75% Grass cover, Fair, HSG B
2,086	79	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 2S: Remaining Areas

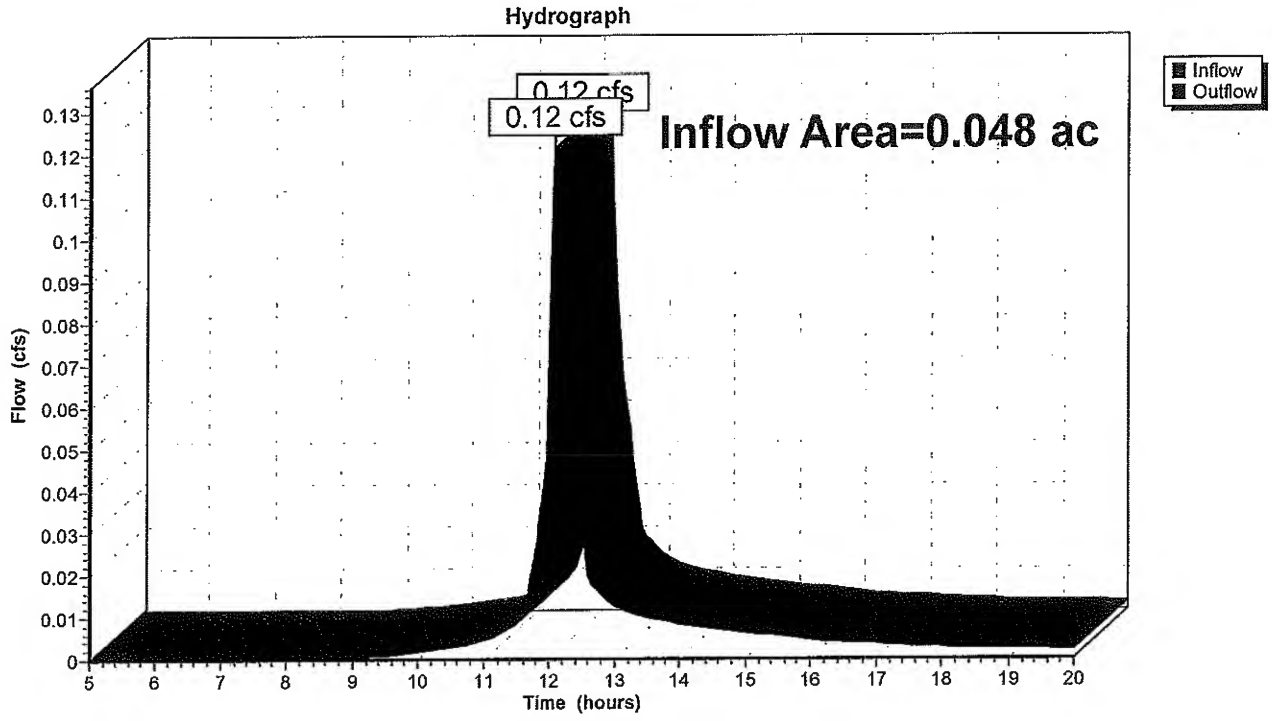


Reach 1R: Total Offsite

Inflow Area = 0.048 ac, Inflow Depth = 2.05" for 10 Year Storm event
Inflow = 0.12 cfs @ 12.09 hrs, Volume= 0.008 af
Outflow = 0.12 cfs @ 12.09 hrs, Volume= 0.008 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach 1R: Total Offsite



Pond 1P: Porous pvmt Base

Design Perc rate of soils = 60 MPI

Inflow Area = 0.182 ac, Inflow Depth = 2.47" for 10 Year Storm event
Inflow = 0.08 cfs @ 17.94 hrs, Volume= 0.037 af
Outflow = 0.08 cfs @ 17.99 hrs, Volume= 0.037 af, Atten= 0%, Lag= 2.8 min
Discarded = 0.08 cfs @ 17.99 hrs, Volume= 0.037 af

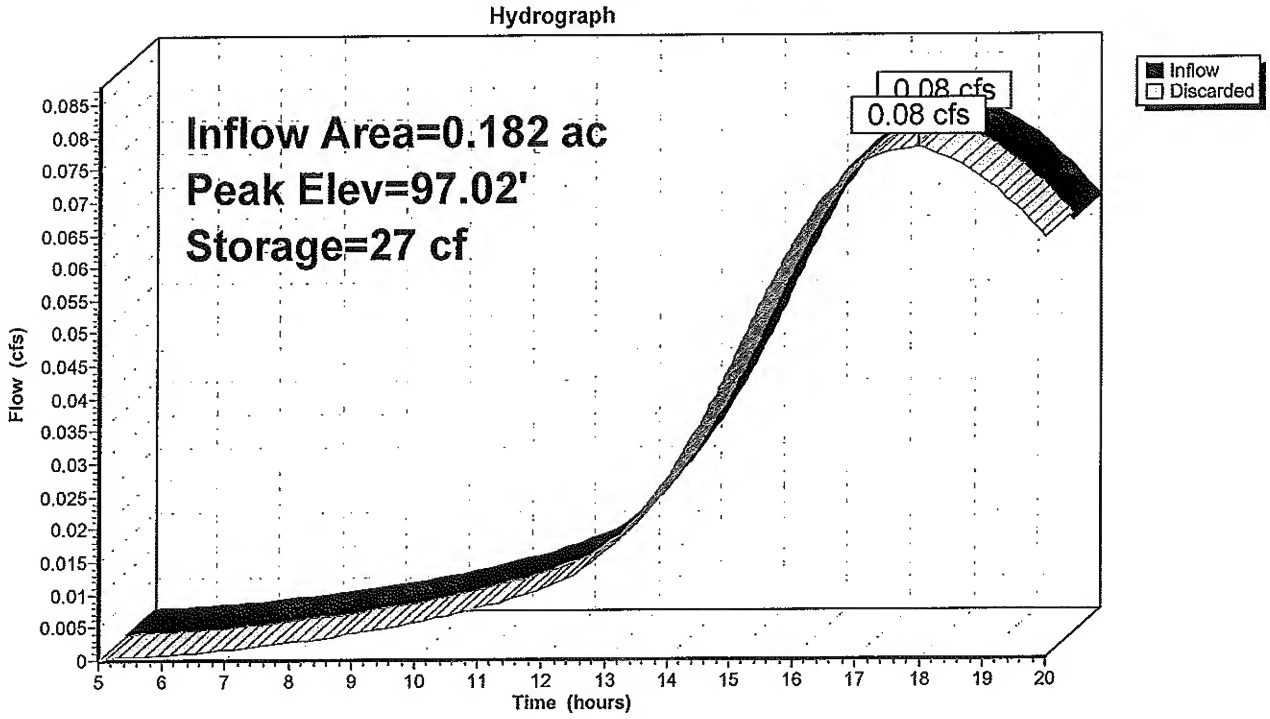
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 97.02' @ 17.99 hrs Surf.Area= 3,860 sf Storage= 27 cf
Plug-Flow detention time= 5.7 min calculated for 0.037 af (99% of inflow)
Center-of-Mass det. time= 2.8 min (992.9 - 990.1)

#	Invert	Avail.Storage	Storage Description
1	97.00'	3,088 cf	**38.60'W x 100.00'L x 2.00'H Prismatoid** 7,720 cf Overall x 40.0% Voids

#	Routing	Invert	Outlet Devices
1	Discarded	0.00'	**0.001400 fpm Exfiltration over entire Surface area**

Discarded OutFlow Max=0.09 cfs @ 17.99 hrs HW=97.02' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.09 cfs)

Pond 1P: Porous pvmt Base



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Flow to Porous Pvmt Runoff Area=7,914 sf Runoff Depth=3.78"
Tc=462.0 min CN=98 Runoff=0.12 cfs 0.057 af

Subcatchment 2S: Remaining Areas Runoff Area=2,086 sf Runoff Depth=3.79"
Tc=6.0 min CN=79 Runoff=0.22 cfs 0.015 af

Reach 1R: Total Offsite Inflow=0.22 cfs 0.015 af
Outflow=0.22 cfs 0.015 af

Pond 1P: Porous pvmt Base Peak Elev=97.21' Storage=321 cf Inflow=0.12 cfs 0.057 af
Outflow=0.09 cfs 0.050 af

Total Runoff Area = 0.230 ac Runoff Volume = 0.072 af Average Runoff Depth = 3.78"

Subcatchment 1S: Flow to Porous Pvmt

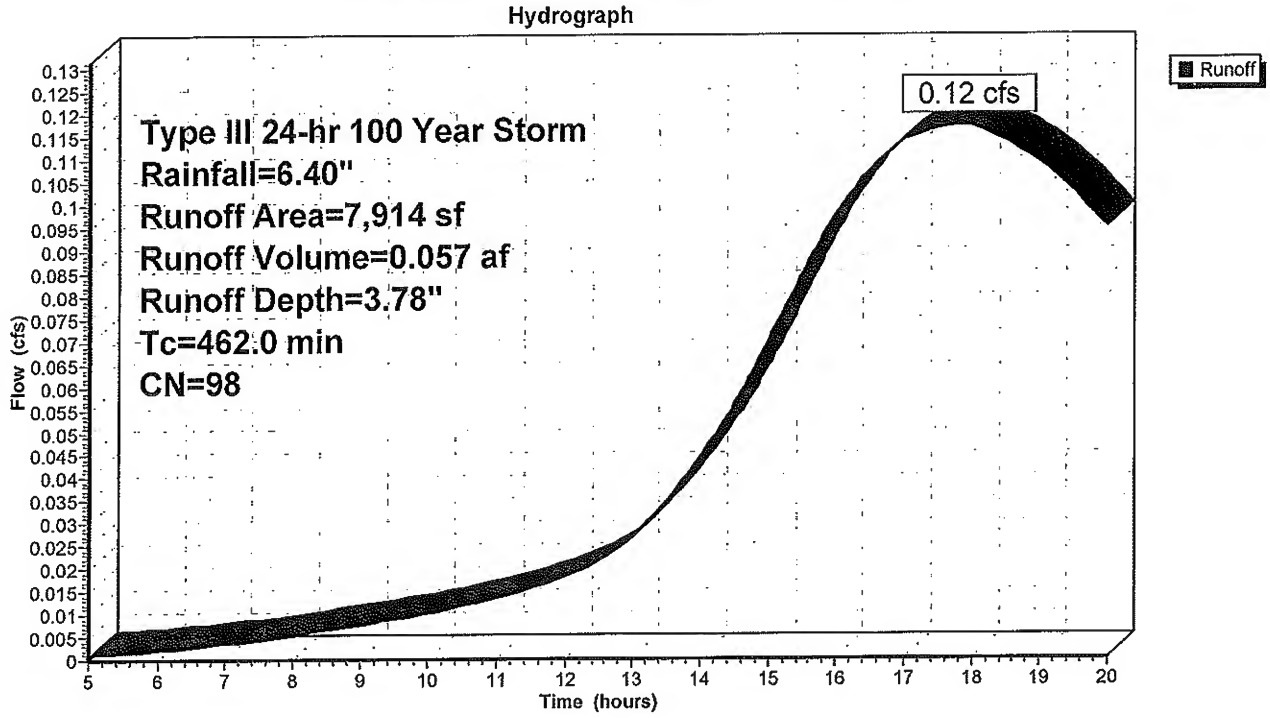
Runoff = 0.12 cfs @ 17.94 hrs, Volume= 0.057 af, Depth= 3.78"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100 Year Storm Rainfall=6.40"

Area (sf)	CN	Description
3,860	98	Porous Pvmt
3,892	98	Portion of Roofed Area
162	98	dumpster pad area
7,914	98	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
462.0					**Direct Entry,**

Subcatchment 1S: Flow to Porous Pvmt



Subcatchment 2S: Remaining Areas

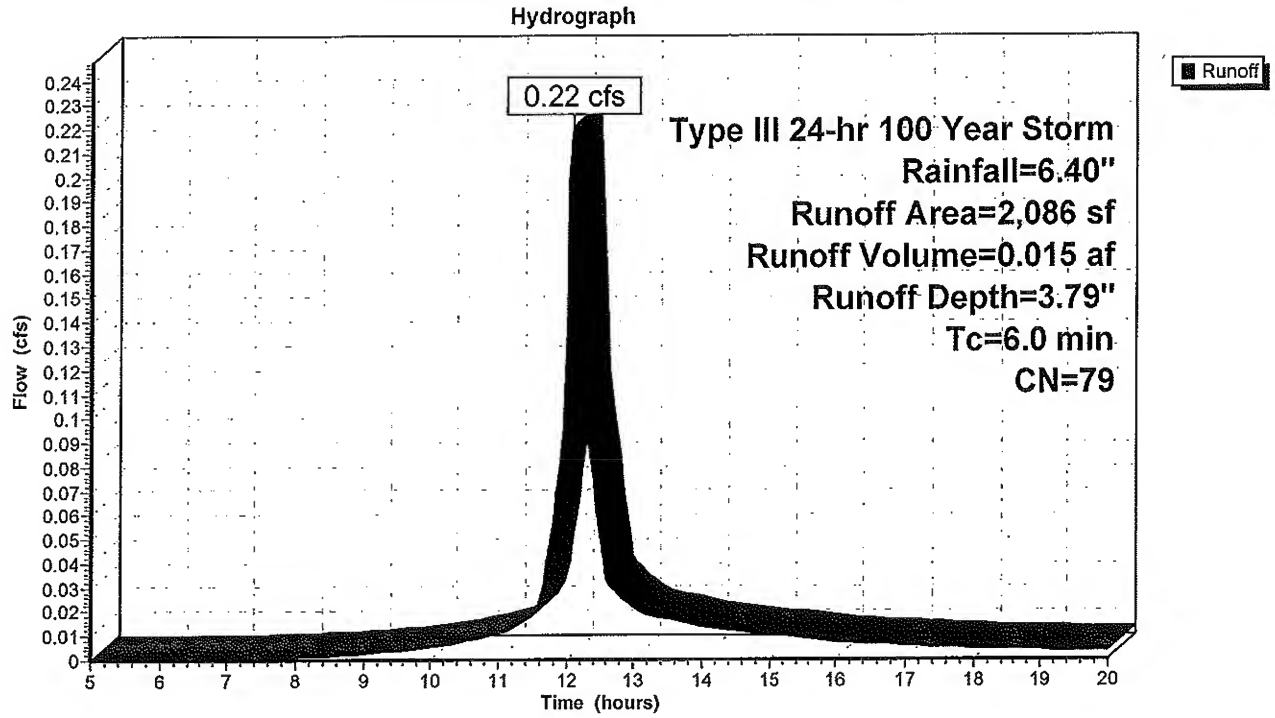
Runoff = 0.22 cfs @ 12.09 hrs, Volume= 0.015 af, Depth= 3.79"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100 Year Storm Rainfall=6.40"

Area (sf)	CN	Description
426	98	Walkway
307	98	Apshalt Berm
1,353	69	50-75% Grass cover, Fair, HSG B
2,086	79	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 2S: Remaining Areas

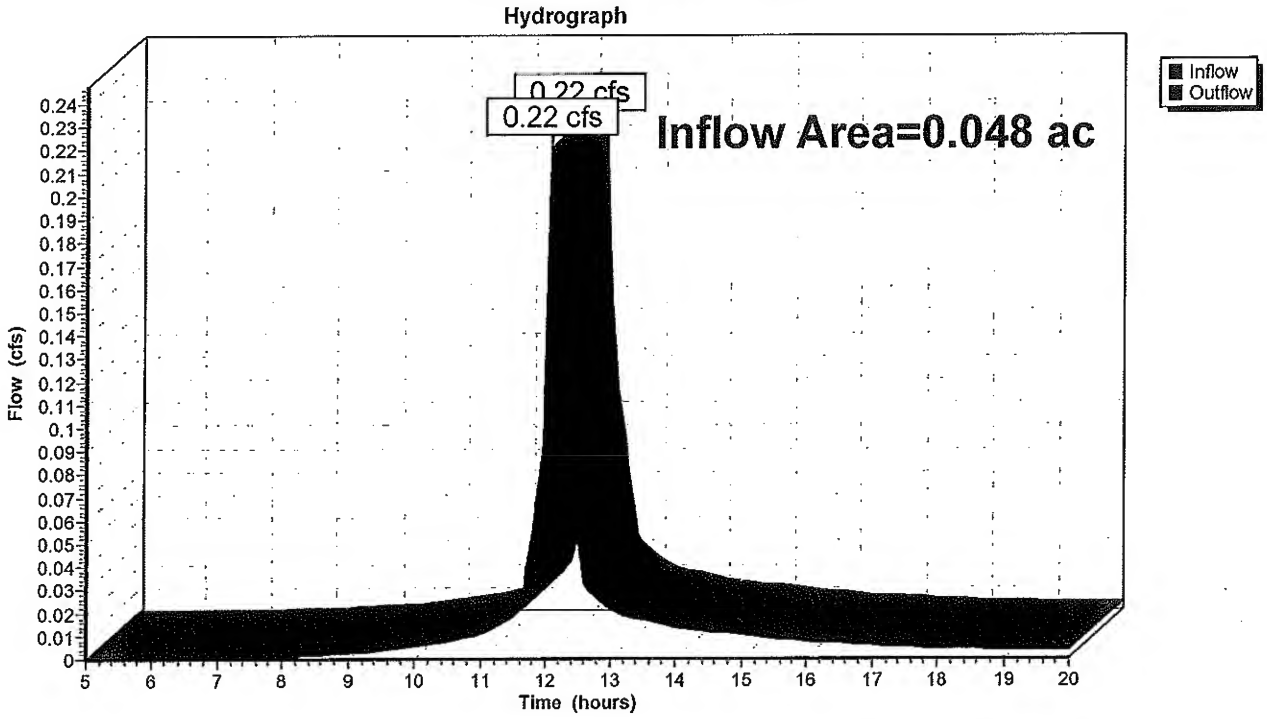


Reach 1R: Total Offsite

Inflow Area = 0.048 ac, Inflow Depth = 3.79" for 100 Year Storm event
Inflow = 0.22 cfs @ 12.09 hrs, Volume= 0.015 af
Outflow = 0.22 cfs @ 12.09 hrs, Volume= 0.015 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach 1R: Total Offsite



Pond 1P: Porous pvmt Base

Design Perc rate of soils = 60 MPI

Inflow Area = 0.182 ac, Inflow Depth = 3.78" for 100 Year Storm event
Inflow = 0.12 cfs @ 17.94 hrs, Volume= 0.057 af
Outflow = 0.09 cfs @ 15.80 hrs, Volume= 0.050 af, Atten= 23%, Lag= 0.0 min
Discarded = 0.09 cfs @ 15.80 hrs, Volume= 0.050 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 97.21' @ 20.00 hrs Surf.Area= 3,860 sf Storage= 321 cf
Plug-Flow detention time= 19.0 min calculated for 0.050 af (87% of inflow)
Center-of-Mass det. time= (not calculated: outflow precedes inflow)

#	Invert	Avail.Storage	Storage Description
1	97.00'	3,088 cf	**38.60'W x 100.00'L x 2.00'H Prismatoid** 7,720 cf Overall x 40.0% Voids

#	Routing	Invert	Outlet Devices
1	Discarded	0.00'	**0.001400 fpm Exfiltration over entire Surface area**

Discarded OutFlow Max=0.09 cfs @ 15.80 hrs HW=97.02' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.09 cfs)

Pond 1P: Porous pvmt Base